



(19)

(11) Publication number: **11070322 A**

Generated Document.

## PATENT ABSTRACTS OF JAPAN

(21) Application number: **10172543**

(51) Intl. Cl.: **B01D 53/86 B01D 53/86 B01J 21/04 B01J 21/06 B01J 23/06 B01J 23/10 B01J 23/14 B01J 23/42 B01J 23/745 B01J 23/75 B01J 23/755**

(22) Application date: **19.06.98**

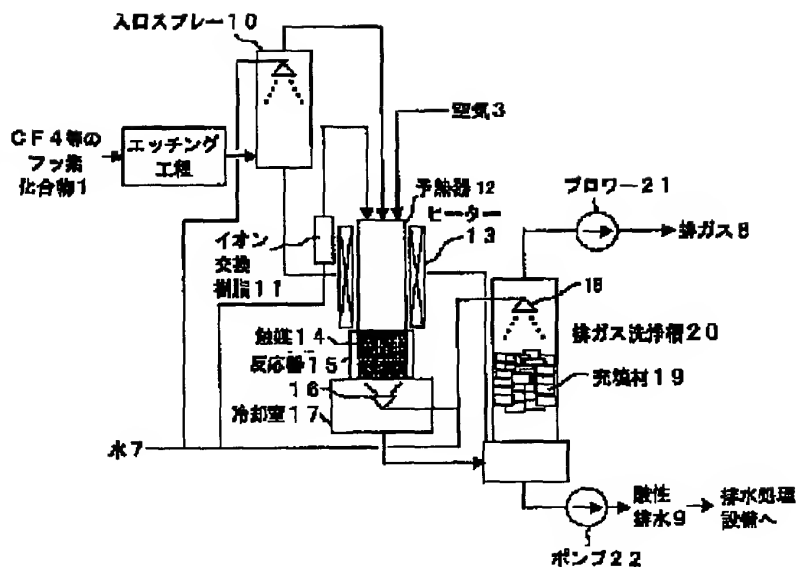
<p>(30) Priority: <b>20.06.97 JP 09163717</b></p> <p>(43) Date of application publication: <b>16.03.99</b></p> <p>(84) Designated contracting states:</p>	<p>(71) Applicant: <b>HITACHI LTD</b></p> <p>(72) Inventor: <b>SUGANO SHUICHI IKEDA SHINZO YASUDA TAKESHI YAMASHITA HISAO AZUHATA SHIGERU TAMADA SHIN IRIE KAZUYOSHI</b></p> <p>(74) Representative:</p>
---	--

(54) DECOMPOSITION  
TREATMENT METHOD  
OF  
FLUORINE-CONTAINING  
COMPOUND, CATALYST  
AND DECOMPOSITION  
TREATMENT DEVICE

(57) Abstract:

PROBLEM TO BE SOLVED: To efficiently decompose and treat fluorine compounds containing only fluorine as halogen such as CF<sub>4</sub> and C<sub>2</sub>F<sub>6</sub>.

SOLUTION: In the method for decomposing and treating fluorine-containing compounds, gas flow consisting of fluorine compounds containing only fluorine as halogen is brought into contact with an Al-containing catalyst such as a catalyst consisting of Al and Ni, Al and Zn, Al and Ti at about 200-800°C in the existence of steam and fluorine contained in the gas flow and fluorine contained in gas flow is converted into hydrogen fluoride. Further, the device for decomposing and treating the fluorine-containing compounds is equipped with a reactor 15 filled with the catalyst 14 containing Al, a water adding vessel in which steam is added to gas flow containing a compound consisting of fluorine and one of carbon, sulfur and nitrogen treated in the reactor 15 and a heating means consisting of a preheater 12 and a heater 13 by which one hand of the catalyst 14 filled in the reactor 15 and the gas flow containing fluorine compounds 1 introduced into the reactor 15 is heated at such temperature that the fluorine compounds 1 are hydrolyzed.



COPYRIGHT: (C)1999,JPO